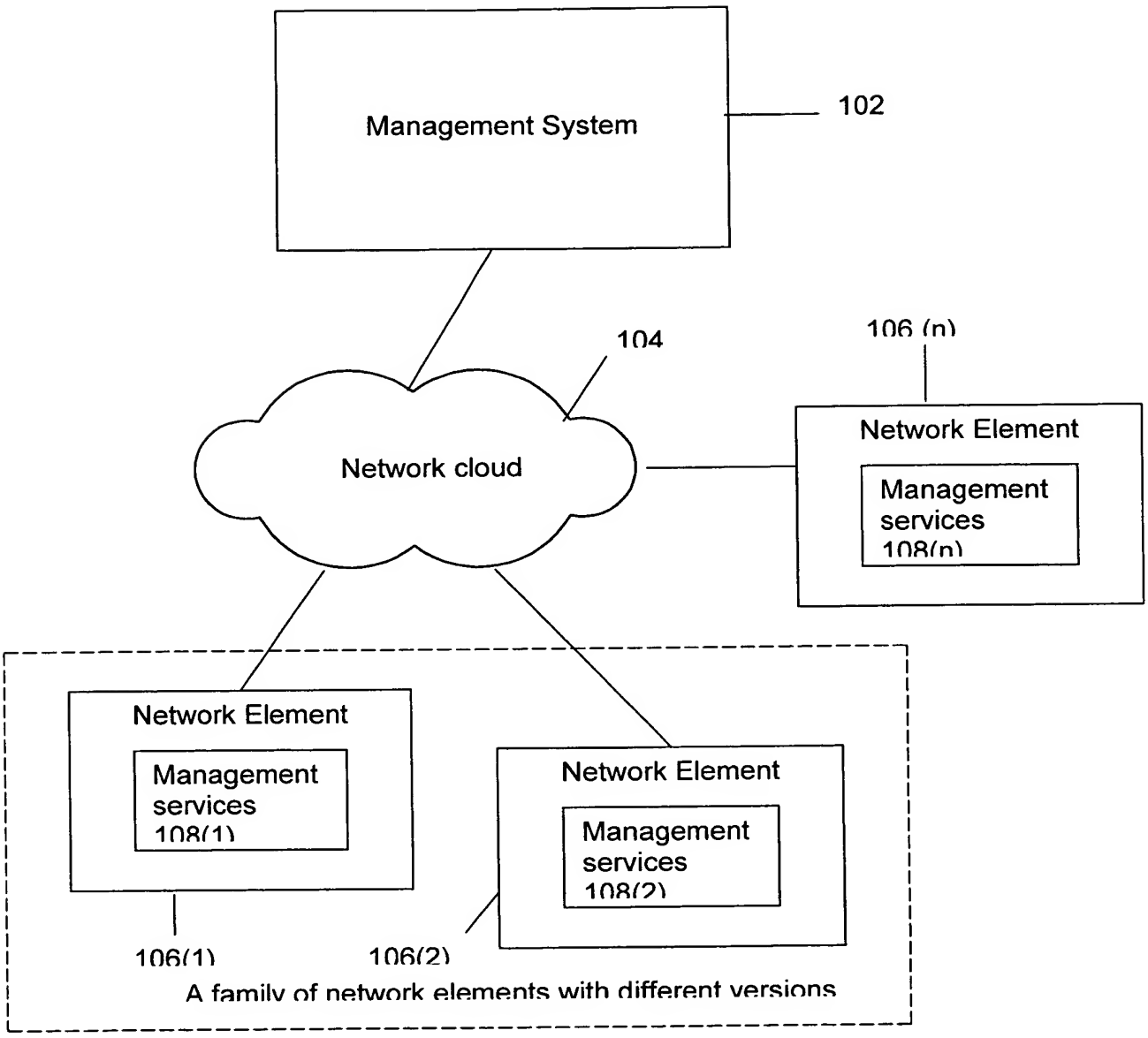
Management System
102
104
106 (n)
Network cloud
Network Element
Management services 108(n)
Network Element
Management services 108(1)
Network Element
Management services 108(2)
106(1)
106(2)
A family of network elements with different versions

**Figure 1**

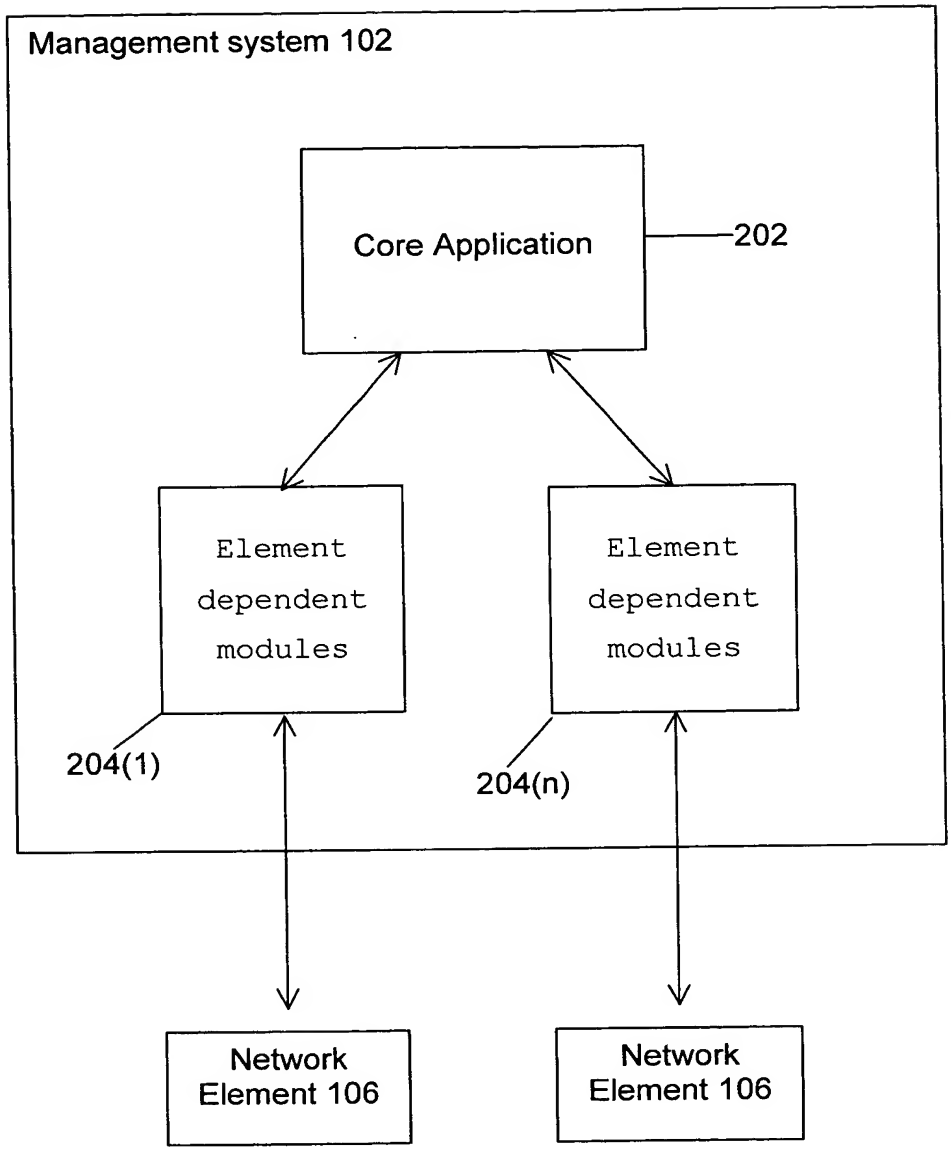
Management system 102
Core Application
202
Element dependent modules
Element dependent modules
204(1)
204(n)
Network Element 106
Network Element 106

**Figure 2**

## Element dependent modules

*NE type dependent &*

**Version independent Modules:**

- Connection manager
- Event Handler

NE type dependent &
**Version dependent Modules:**

Information descriptors:

- NE descriptor
- Service descriptor
- MO descriptor
- Screen descriptor
- Operation descriptor

Data presentation:

- Managed Object implementation (XXXMO class)

Operation support:

- Service proxy

**Figure 3**

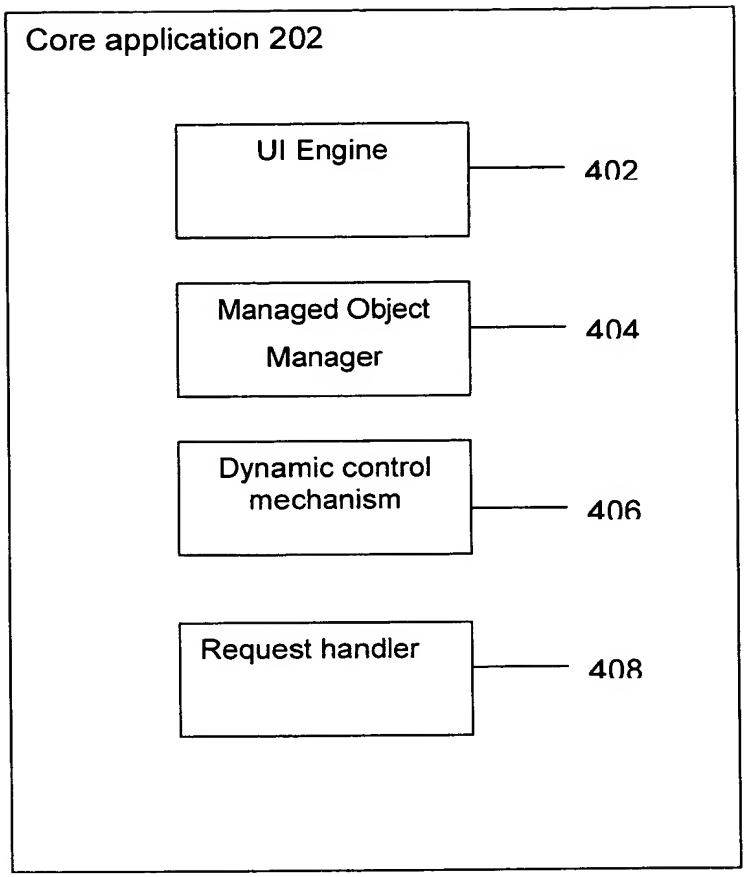
Core application 202
UI Engine
402
Managed Object Manager
404
Dynamic control mechanism
406
Request handler
408

**Figure 4**

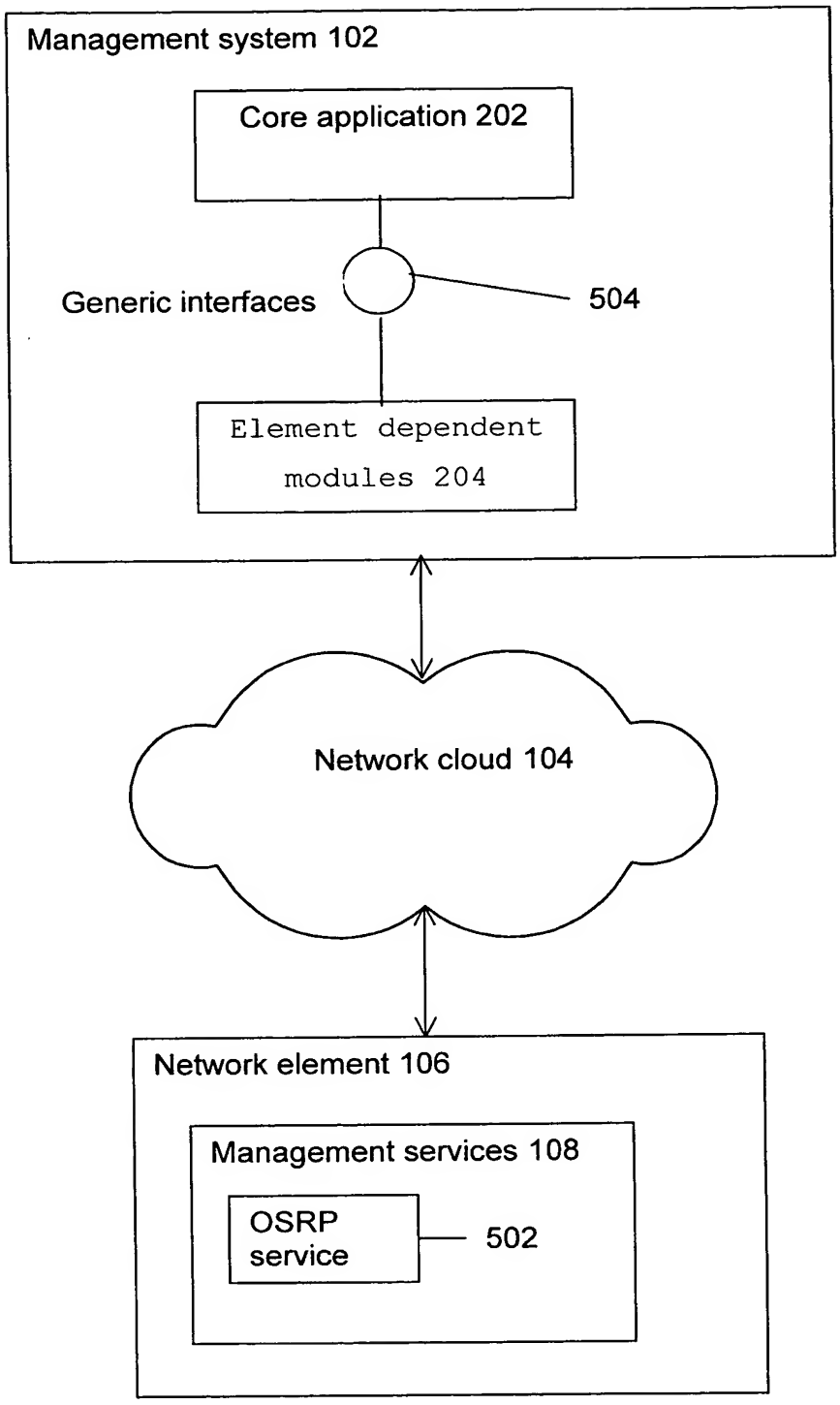
Management system 102
Core application 202
Generic interfaces
504
Element dependent modules 204
Network cloud 104
Network element 106
Management services 108
OSRP service
502

**Figure 5**

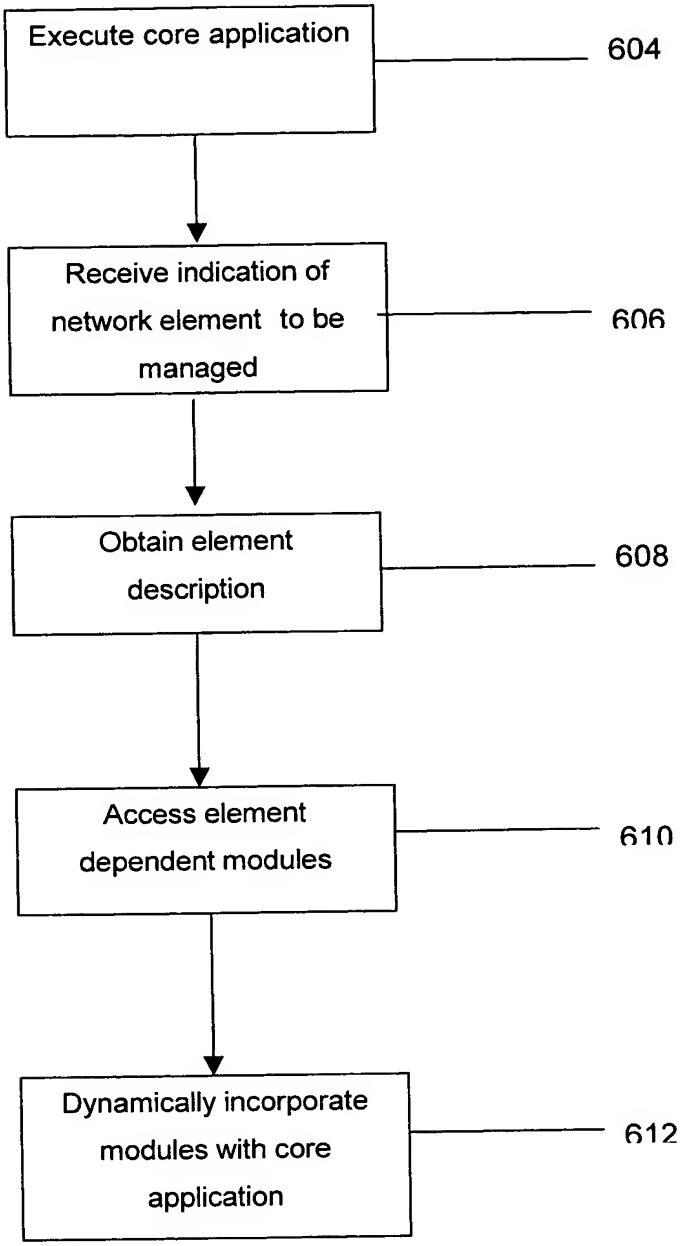
Execute core application
604
Receive indication of network element to be managed
606
Obtain element description
608
Access element dependent modules
610
Dynamically incorporate modules with core application
612

**Figure 6**

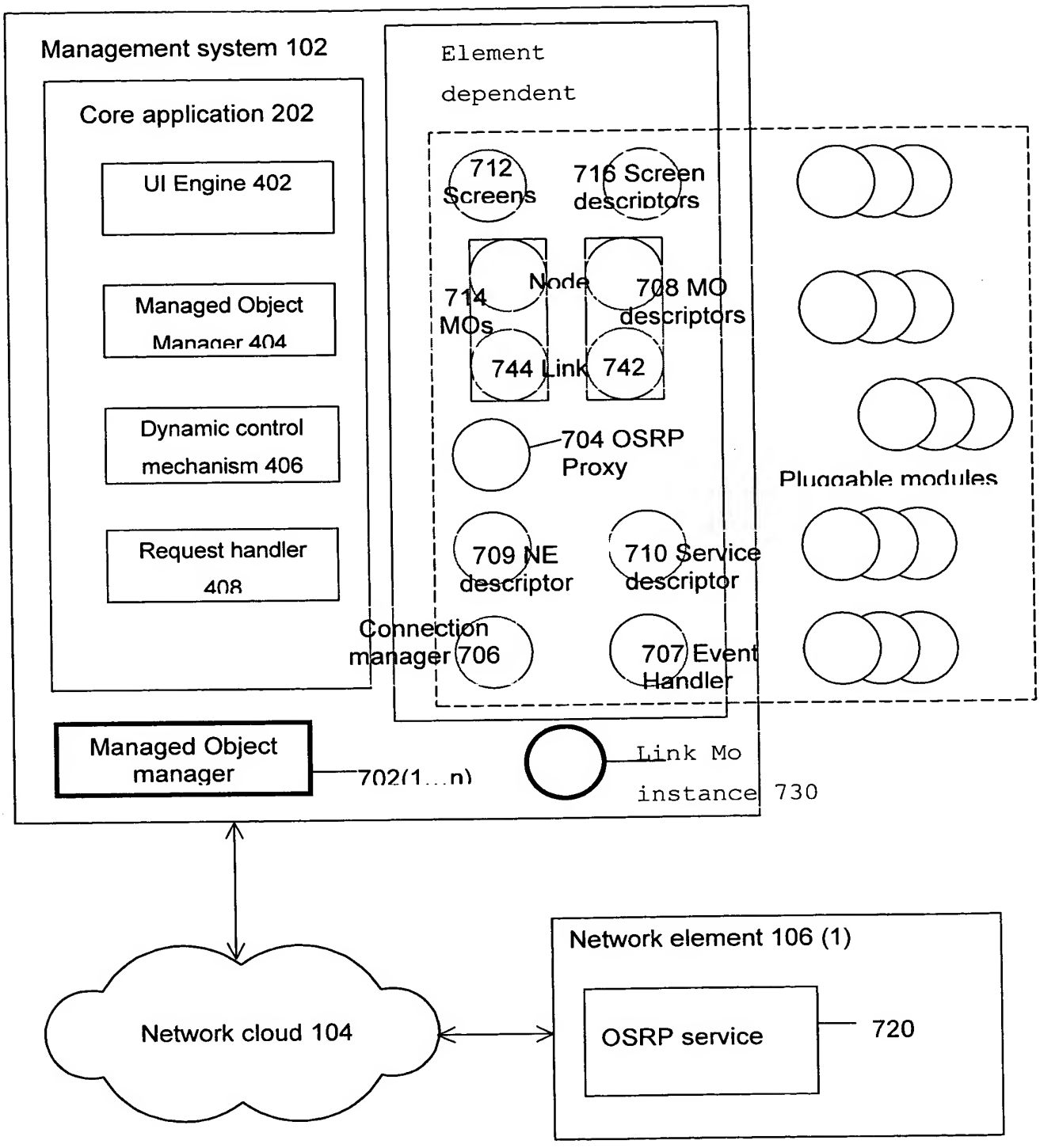
Management system 102
Core application 202
UI Engine 402
Managed Object Manager 404
Dynamic control mechanism 406
Request handler 408
Element dependent
712 Screens
716 Screen descriptors
714 MOs
Node
708 MO descriptors
744 Link
742
704 OSRP Proxy
Pluggable modules
709 NE descriptor
710 Service descriptor
Connection manager 706
707 Event Handler
Managed Object manager
702(1...n)
Link Mo instance 730
Network cloud 104
Network element 106 (1)
OSRP service
720

**Figure 7**

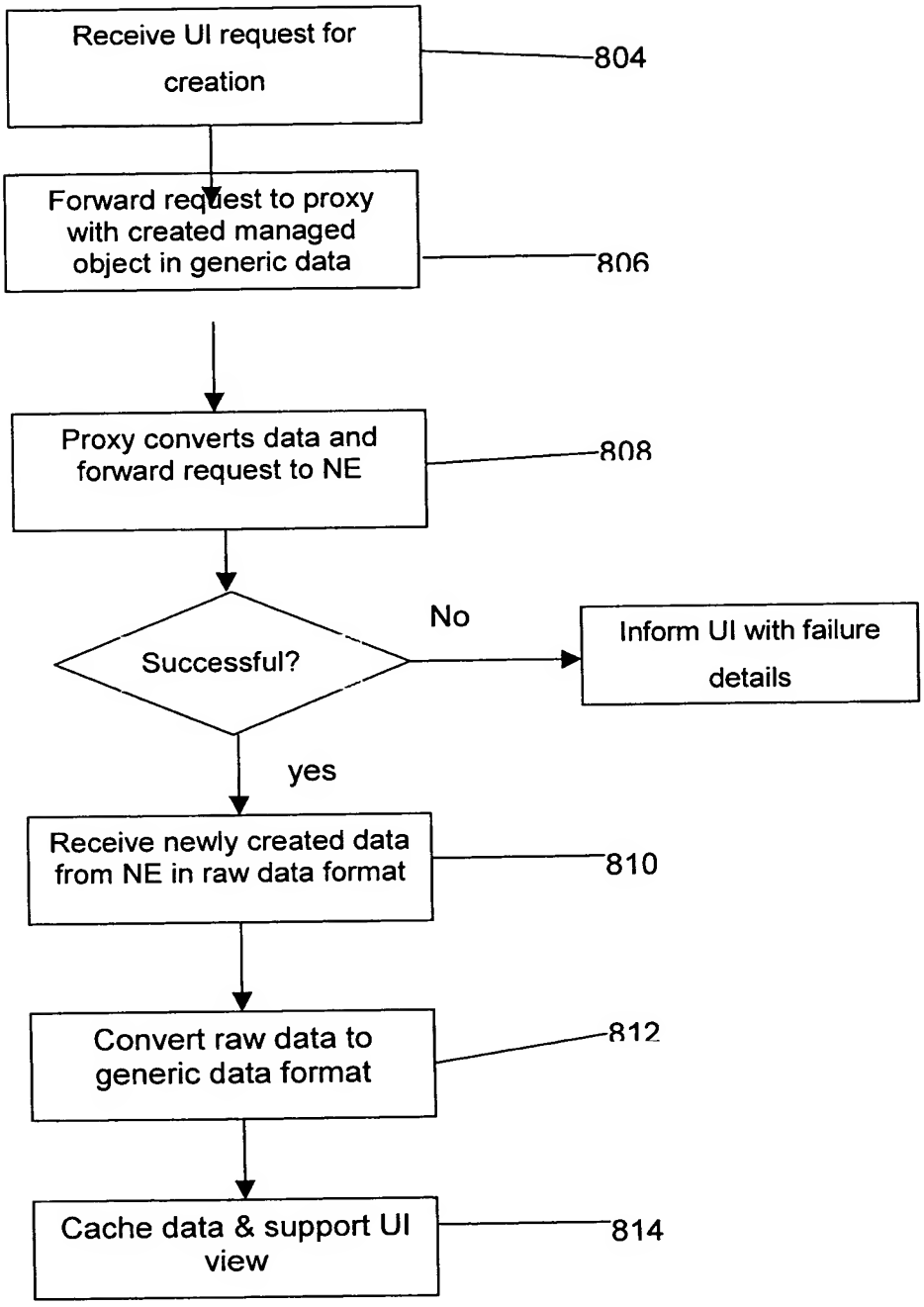
Receive UI request for creation
804
Forward request to proxy with created managed object in generic data
806
Proxy converts data and forward request to NE
808
Successful?
No
Inform UI with failure details
yes
Receive newly created data from NE in raw data format
810
Convert raw data to generic data format
812
Cache data & support UI view
814

**Figure 8**

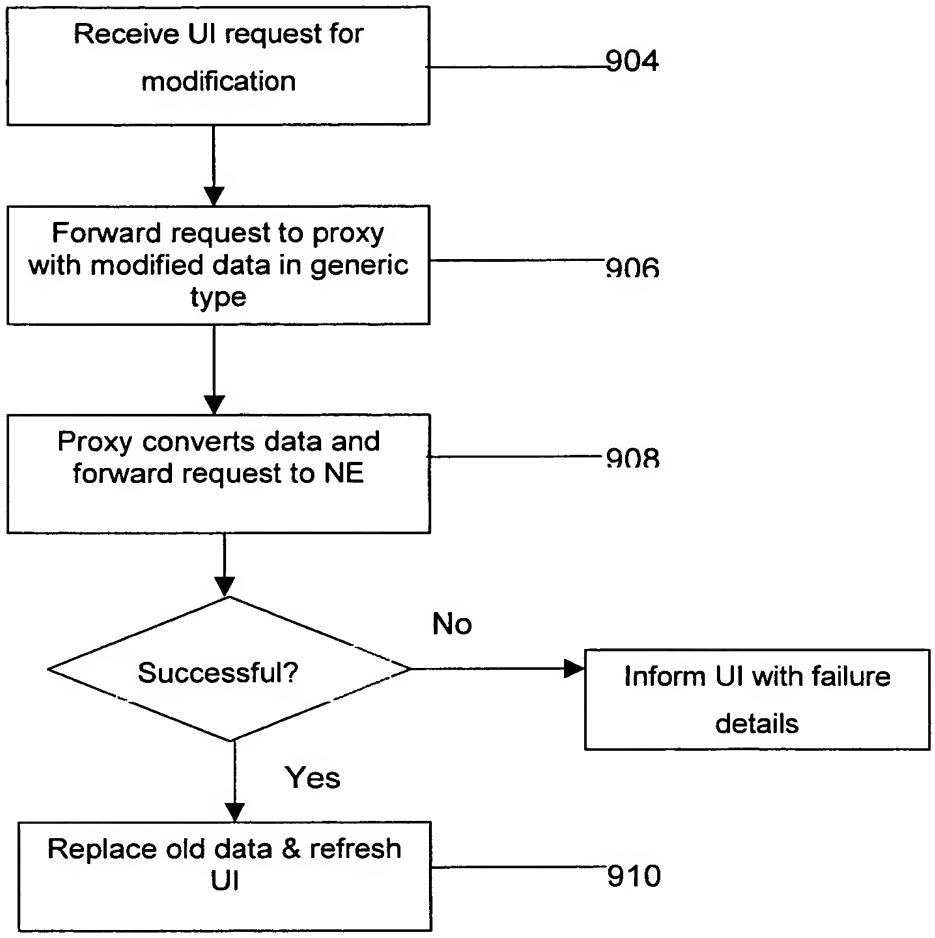
Receive UI request for modification
904
Forward request to proxy with modified data in generic type
906
Proxy converts data and forward request to NE
908
Successful?
No
Inform UI with failure details
Yes
Replace old data & refresh UI
910

**Figure 9**

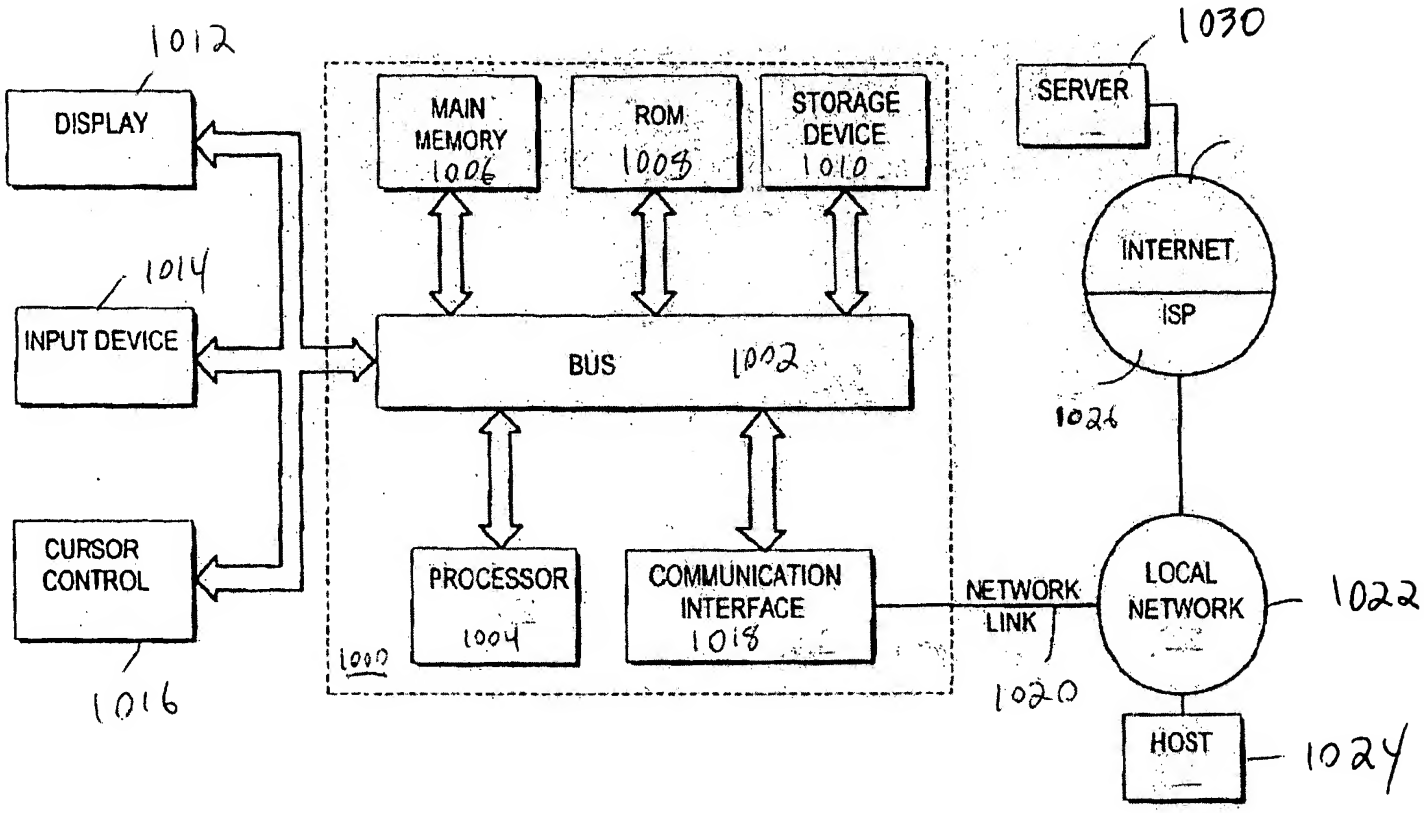
1012
DISPLAY
1014
INPUT DEVICE
CURSOR CONTROL
1016
MAIN MEMORY 1006
ROM 1008
STORAGE DEVICE 1010
BUS 1002
PROCESSOR 1004
COMMUNICATION INTERFACE 1018
1000
NETWORK LINK
1020
1030
SERVER
INTERNET
ISP
1026
LOCAL NETWORK
1022
HOST
1024

Fig. 10